RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT AND
AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/634,274
Filing Date: August 5, 2003
Title: H2 PLASMA TREATMENT

Dkt: 1303.110US1

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IN THE FIGURES

Figure 3B is amended to change the reference number 307 to 317 to correspond to the reference number 317 used in the specification on page 18, lines 3-22 regarding Figure 3B.

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REMARKS

This responds to the Notice of Non-Compliant Amendment mailed on September 19, 2005, and to the Office Action mailed on March 28, 2005.

The status of claims 13-17, 20, 23, 25-31, 37, 39-42, 44-50, and 52-55 has been changed to "Withdrawn—Currently Amended", as was required by the Notice of Non-Compliant Amendment.

Claims 1-5 and 8-12 are amended and withdrawn claims 13-17, 20, 23, 25-31, 37, 39-42, 44-50, and 52-55 are amended, no claims are canceled, and no claims are added; as a result, claims 1-57 and claims 104-106 are now pending in this application with claims 1-12 currently pending examination. The amendments to the claims are fully supported by the specification as originally filed. No new matter is introduced. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Support for the amendments may be found in the specification, for example, at page 11, lines 15-17.

In the Drawings

Figure 3B is amended to change the reference number 307 to 317 to correspond to the reference number 317 recited in the specification on page 18, lines 3-22 regarding Figure 3B.

In the Specification

The paragraph beginning on line 4 of page 1 and the paragraph beginning on line 4 of page 6 are amended to update the status of the commonly assigned U.S. patent application referenced in each paragraph.

§112 Rejection of the Claims

Claims 1-12 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. Claims 2-12 were also rejected as being dependent on the rejected independent base claim. Applicant traverses these grounds for rejection of the claims.

In the Office Action, it is stated that "the limitation 'capping adhesion/barrier layer' is not clear and confusing." Applicant respectfully disagrees. The term "adhesion/barrier layer" is

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provided in the specification at, for example, on page 4, line 26, and discussed throughout the specification. The term "capping" is used as an adjective modifying the term "adhesion/barrier layer." Common meaning of the verb to cap may include to cover, protect, or seal with a cap, to lie over or on top of, to cover, or to apply the finishing touch to, to complete, Thus, the adjective "capping" applied to the term "adhesion/barrier layer" provides clarity to the adhesion/barrier layer deposited on the core conductive layer, as recited in claim 1. For at least these reasons stated herein the term 'capping adhesion/barrier layer' satisfies 35 U.S.C. § 112, second paragraph.

With respect to the rejections of claims 2-12 as applied to claim 1. Applicant submits that for at the least the reasons stated above with respect to claim 1, claims 2-12 satisfy 35 U.S.C. § 112.

In the Office Action, it is stated that "[c]laim 2 recites the limitation 'wherein forming a first conductive layer includes depositing a seed layer on a first adhesion/barrier layer' in line 1-2. There is lack of antecedent basis for 'first adhesion/barrier layer.' "Applicant notes that use of the adjective "first" before "adhesion/barrier layer" distinguishes this adhesion/barrier layer from the capping adhesion/barrier layer. Applicant submits that in claim 2 the quoted term "a first adhesion/barrier layer" is a proper manner in which to establish antecedent basis for the "first adhesion/barrier layer." A basis for the above quoted statement is not provided in the Office Action. Applicant requests that a reference be provided that supports the alleged proposition that "a first adhesion/barrier layer" does not establish proper antecedent basis. Furthermore, since no explanation is provided in the Office Action, Applicant submits that sufficient specificity is not provided with respect to this rejection of claim 2. Thus, Application submits that this rejection of claim 2 is not proper.

In the Office Action, it is stated that "[c]laim 3 recites the limitation 'wherein depositing a seed layer on a first adhesion/barrier layer' in line 1-2. There is lack of antecedent basis for 'first adhesion/barrier layer.'" Applicant submits that in claim 3 the quoted section is written to properly couple claim 3 to the feature in claim 2 for which claim 3 provides further limitations. As discussed above, the term, "a first adhesion/barrier layer," has proper antecedent basis in claim 2 and, therefore there is proper antecedent basis for "a first adhesion/barrier layer" in claim 3. A basis or an explanation for the above quoted statement is

not provided in the Office Action. Therefore, Applicant submits that sufficient specificity is not provided with respect to this rejection of claim 3. Thus, Application submits that this rejection of claim 3 is not proper.

In the Office Action, it is stated that "[c]laims 2-12 also rejected as being directly dependent of the rejected independent base claim." No further discussion is provided with respect to this rejection in the section of the Office Action regarding 35 U.S.C. § 112, second paragraph. No explanation is provided that distinguishes the rejection of claims 2-5 and 8-12 in this quoted statement as being different than the rejections of claims 2-5 and 8-12 previously discussed in the Office Action. Without such specificity, Applicant submits that these rejections under 35 U.S.C. § 112, second paragraph are not proper.

However, claims 1-5 and 8-12 are amended to expedite prosecution of the instant application.

Applicant respectfully requests withdrawal of these rejections of claims 1-12, and reconsideration and allowance of these claims.

§103 Rejection of the Claims

Claims 1-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrar (U.S. 6,376,370) in view of Agnello et al. (U.S. 6,255,217). Applicant traverses these grounds for rejection of the claims.

Applicant cannot find in the combination of Farrar and Agnello et al. (hereafter Agnello) a teaching or a suggestion of a method including processing a capping layer such that the capping layer completely covers the top surface of a core conductive layer substantially without being on areas surrounding the core conductive layer, as recited in claim 1. Therefore, Applicant submits that the combination of Farrar and Agnello does not teach or suggest all the elements of claim 1. Thus, Applicant submits that for at least the reason stated above, claim 1 is patentable over Farrar in view of Agnello. Claims 2-12 are dependent on claim 1 and are patentable over Farrar in view of Agnello for at least the reasons stated herein.

Applicant respectfully requests withdrawal of these rejections of claims 1-12, and reconsideration and allowance of these claims.

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Withdrawn Claims

Withdrawn claims 13-17, 20, 23, 25-31, 37, 39-42, 44-50, and 52-55 are amended in a manner to follow the amendments to claim 1. Applicant submits that independent claims 13, 27, 40, and 48 and the claims that dependent from these claims are properly linked to claim 1, which Applicant believes is noted in the Office Action discussion with respect the restriction requirement. Thus, with the allowance of claim 1, Applicant respectfully requests the rejoinder and allowance of claims 13-57 and 104-1064. See M.P.E.P. 809.04.

Assertion of Pertinence

Applicant has not responded to the assertion of pertinence stated for the patents cited, but not relied upon, by the Office Action since these patents are not relied upon as part of the rejections in this Office Action. Applicant is expressly not conceding they have any pertinence and reserves the right to respond more fully should any of them form a part of some future rejection.

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2157 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

PAUL A. FARRAR

By his Representatives,

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Date 7 October 2005

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Reg. No. 46,632

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this ______ day of October, 2005.

Name

Signature